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(54) Title: DESATURASE GENES AND THEIR USE**(57) Abstract**

cDNA encoding *C. elegans* Δ^6 desaturase has been cloned and sequenced, and the Δ^6 desaturase amino acid sequence has been determined. The *C. elegans* Δ^6 desaturase has a surprisingly low level of sequence identity with the known borage Δ^6 desaturase. The *C. elegans* Δ^6 desaturase has been expressed in yeast. It and other desaturases can be cloned in host organisms (e.g. plants) and can be used to provide useful metabolites.